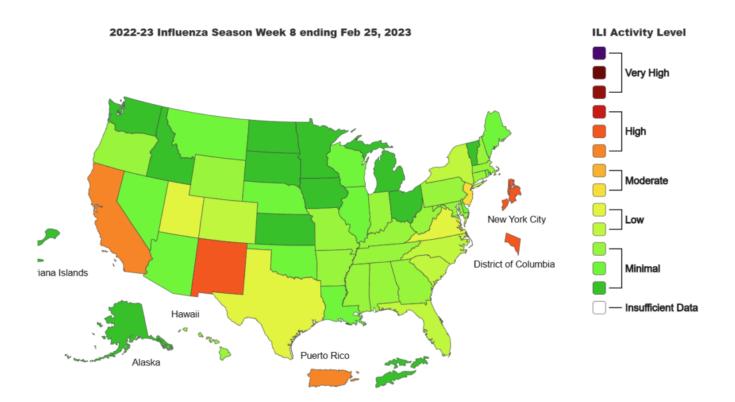


## Influenza Map

Continued reduction in influenza cases but still some present in New Mexico and California. Low activity in Colorado. Still need to consider it along with COVID though.



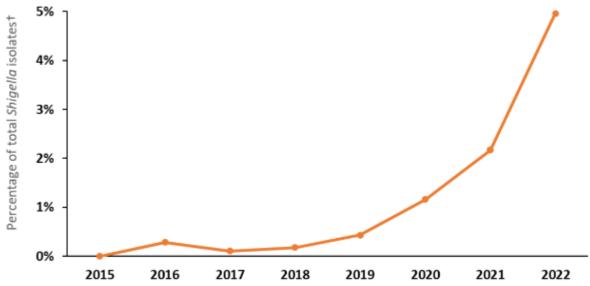
# XDR (extensively drug resistant) Shigella

- 32 cases of XDR Shigella in CO last year.
- Increasing issue nationwide
- Shigella is a reportable condition. Report it to the Health Dept.
- There are few antibiotic options for XDR Shigella.
- It can also spread the antibiotic resistance genes to other bacteria.
- Clinical for XDR Shigella



- $\circ\,$  Fecal oral transmission, person to person contact, contaminated food/water
- $\circ\,$  Easily transmitted by as few as 10-100 organisms.
- Inflammatory (sometimes bloody) diarrhea.
- Dehydration
- Fever, abdominal cramps, tenesmus
- Testing: Stool culture with susceptibilities.
- Usually, self-limiting but antibiotics often prescribed to reduce length of illness or prevent complications. Also, may use antibiotics to try to reduce the spread in institutional settings.
- Can treat with supportive care and no antibiotics if case is not severe.
- Resistant to cipro, azithromycin, ceftriaxone, TMP/SMX, and ampicillin. XDR
  Shigella in the U.S. *typically* are susceptible to carbapenems and fosfomycin.

Figure: Percentage of *Shigella* isolates that showed an extensively drug resistant (XDR)\* phenotype or genotype in the United States, by year, 2015–2022<sup>†</sup>



\*XDR Shigella bacteria (n=239) are defined as resistant to azithromycin, ciprofloxacin, ceftriaxone, trimethoprim-sulfamethoxazole, and ampicillin.

†Among sequenced Shigella isolates submitted to CDC's PulseNet Whole Genome Sequencing Database; data are preliminary and based on broth microdilution susceptibility testing and/or presence of resistance genes and mutations found in whole genome sequences of bacterial DNA.



https://docshepherd.com/wp-content/uploads/2023/03/02282023-HAN-Advisory-XDR-Shigell a.pdf

<u>Health Alert Network (HAN) – 00486 | Increase in Extensively Drug-Resistant Shigellosis in</u> <u>the United States (cdc.gov)</u>

# Urine PCR Testing

# Summary Recommendation: Do NOT use Urine PCR testing. Stick to CBC, UA with C&S.

I have serious concerns that Urine PCR testing will lead to increased inappropriate use of antibiotics. If the physician/NP/PA does not understand the intricacies of the test, it is not unreasonable to expect that antibiotics may be prescribed when they are not needed, the wrong antibiotic may be prescribed, or an antibiotic with a broader than needed spectrum may be used. All of these cases increase the potential for antibiotic resistance and unnecessary antibiotic prescribing.

In general, PCR testing is VERY sensitive. It will pick up ANY bacteria that is in the sample. In urine, it will amplify contaminants, colonizers, as well as pathogenic organisms.

Urine PCR tests do NOT provide sensitivities. The test identifies bacterial genes known to cause antibiotic resistance but it does NOT provide antibiotic sensitivities.

The report will often provide antibiotic recommendations based on genetic analysis (not sensitivities). The recommendations are not just medical recs but also aimed at ensuring that there is no liability taken on by the testing company. Thus, the recommendations are often for broader spectrum antibiotics than may be necessary in order to limit medico-legal liability.



CDPHE did a pretty good presentation on Urine PCR Testing....see below.

**CDPHE Stewardship Strategies for Interpretation of Novel Urinary Diagnostics** 

2.7.23Download

#### Active monitoring

- If Loeb criteria not met, consider initiating active monitoring orders:
  - Encourage \_\_\_\_\_ ounces of liquid intake \_\_\_\_ daily until urine is light yellow in color.
  - Record fluid intake every \_\_\_\_\_ hours for \_\_\_\_\_ hours.
  - Assess vital signs, including temp, every \_\_\_\_\_ hours for \_\_\_\_\_ hours.
  - Request notification if symptoms worsen or if unresolved in \_\_\_\_\_hours.
  - Consult pharmacist to review medication regimen.
- AMDA recommends increased hydration as supportive care for UTI.

AHRQ. Available at: https://www.ahrq.gov/sites/default/files/wysiwyg/nhguide/4\_TK1\_T1-SBAR\_UTI\_Final.pdf. Ashraf MS, et al. JAMDA 2020; 21:12e24.





#### AMDA diagnosis and treatment of UTI

UTI syndrome	Diagnostic findings	Treatment and duration	Note
Asymptomatic bacteriuria	≥100,000 CFU/mL of bacteria, no s/s localized to genitourinary tract.	No antibiotics	
Simple cystitis	≥100,000 CFU/mL of bacteria or ≥100 CFU in specimen by straight catheter. Localized symptoms: acute dysuria, suprapubic tenderness, new/worsening incontinence, frequency, urgency, gross hematuria.	Nitrofurantoin x five days. TMP-SMX x three days. Beta-lactams x 3-7 days. Fosfomycin x one dose. Fluoroquinolones x three days.	FQ use should be minimized, not considered first-line
Catheter-associated UTI	Systemic such as fever, rigors, chills or localized symptoms as above + suprapubic/CVA tenderness or acute pain/swelling/tenderness of testes, epididymis, prostate.	If symptoms resolve quickly, seven days; if delayed response, 10-14 days.	If acute pain/swelling/tenderness, evaluate for prostatitis or epididymitis.
Pyelonephritis	≥100,000 CFU/mL of bacteria or ≥100 CFU in specimen by straight catheter. Systemic: Fever, rigors/chills, fatigue/malaise, nausea/vomiting, dysuria, suprapubic tenderness, CVA tenderness, local symptoms above.	TMP-SMX x 14 days Beta-lactams x 10-14 days FQ x seven days.	If pelvic or perineal pain in men, evaluate for prostatitis.
MS, et al. JAMDA 2020; 21:1			COLORAD Department of Publ Health & Environm

Ashraf MS, et al. JAMDA 2020; 21:12e24. Katz MJ, et al. JAMA Network Open. 2022;5(2):e220181.

Schizophrenia-Diagnosis-Executive-Summary.AMDA Download

### Heart2Hearts Advanced Care Planning Cards

Card deck to help start conversations about ACP and consider issues that are often overlooked during care planning.

https://www.discussdirectives.com/heart2hearts-acp.html



#### Heart2Hearts®: Advance Care Planning



"How do I start a conversation about my end-of-life healthcare wishes?" "This is really uncomfortable." "What should I say?" These questions were asked over and over again by patients. As a result, the **Heart2Hearts**® deck of cards were invented in order to provide 52 conversation starters. You may find that you want to use them to play poker or as a regular deck of cards. Be prepared to have the most meaningful Heart2Hearts® conversation of your life. A few sample cards:

